

## **REMARKS**

Claims 1-13 are now pending in this application. Claims 1 and 8 are independent. Claims 1, 8, and 10 have been amended, and no claims have been canceled by this amendment. New dependent claims 12-13 have been added to further define that which Applicants regard as their invention using alternative claim language. No new matter is involved with any claim amendment or new claim.

### **Indefiniteness Rejection Under §112¶2**

Withdrawal of the rejection of claims 1, 8, and 10 under 35 U.S.C. §112, second paragraph, as being indefinite, is requested. These claims have been amended in a manner that is believed to overcome the asserted bases for indefiniteness.

### **Objection to the Claims**

Withdrawal of the objection to claim 8 is requested. Applicants respectfully traverse the Examiner's objection to the word "the" appearing in the limitation "the at least one...."

Antecedent basis for use of "the" is provided by the previous recitation of "a signal generator for generating ***at least one error signal*** based on...."

Reciting "***the*** at least one error signal..." is in full accord with standard U.S. practice, as can be seen by any number of issued patents with this type of recitation. However, in an effort to expedite prosecution of this application and to be responsive to the Examiner's objection, the word "the" has been amended to read "said". Accordingly, reconsideration and allowance of claim 8 are respectfully requested.

### **Anticipation Rejection By Sheu et al**

Withdrawal of the rejection of claims 1-3, 5-8, and 10-11 under 35 U.S.C. §102(e) as being anticipated by Sheu et al. (US 6,717,892) is requested.

As a minor procedural note, it appears that claim 10 has been incorrectly identified as being anticipated by Sheu et al., since there is no discussion of the anticipation of claim 10, and since an unpatentability rejection of claim 10 is provided elsewhere in the Official Action.

Applicant notes that anticipation requires the disclosure, in a prior art reference, of each and every limitation as set forth in the claims.<sup>1</sup> There must be no difference between the claimed invention and reference disclosure for an anticipation rejection under 35 U.S.C. §102.<sup>2</sup> To properly anticipate a claim, the reference must teach every element of the claim.<sup>3</sup> “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference”.<sup>4</sup> “The identical invention must be shown in as complete detail as is contained in the ...claim.”<sup>5</sup> In determining anticipation, no claim limitation may be ignored.<sup>6</sup>

### ***Deficiencies of Sheu et al.***

Figure 5 of Sheu et al. shows a compensator device 98 and a adaptive compensator 100 for keeping the relation between the actuator 72 and the sled 68. The signals from the compensation device 98 and the adaptive compensator 100 are combined before entering the driving device 70. In other words, there is only one signal continuously entering the driving force 70, so that the signal is not “intermittently” or “selectively” provided to the driving device to drive the sledge.

In addition, FIG. 6 of Sheu et al. shows the same feature. In step 216, the driving force and the supplementary force are combined. In other words, there is only one control signal to control the driving device.

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<sup>1</sup> *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985).

<sup>2</sup> *Scripps Clinic and Research Foundation v. Genentech, Inc.*, 18 USPQ2d 1001 (Fed. Cir. 1991).

<sup>3</sup> See MPEP § 2131.

<sup>4</sup> *Verdegaal Bros. v. Union Oil Co. of Calif.*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

<sup>5</sup> *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

<sup>6</sup> *Pac-Tex, Inc. v. Amerace Corp.*, 14 USPQ2d 187 (Fed. Cir. 1990).

Therefore, Sheu et al. fails to disclose the step of “intermittently driving a sledge of the optical disk drive by using the second sledge driving signal to perform error compensation”, as recited in independent claim 1, as amended.

Further, Sheu et al. fails to disclose “a microprocessor configured to generate a second sledge driving signal in response to a magnitude of one or more signals selected from the group consisting of the first sledge driving signal and the error signal, wherein the microprocessor is further configured to control the second sledge driving signal so as to intermittently drive a sledge of the optical disk drive”, as recited in independent claim 8, as amended.

### **Dependent Claim 3**

Independent claim 1 of Sheu et al. discloses a driving force to drive the sled and a supplementary force to push the sled. However, as discussed above, the driving force and the supplementary force are combined before entering the driving device; thus there is only one control signal entering the driving device.

With respect to dependent claim 3, Sheu et al. fails to disclose the further limitations wherein “the first and second sledge driving signals alternately drive the sledge of the optical disk drive for error compensation.”

### **Dependent Claim 7**

With respect to dependent claim 7, col. 5, lines 61-66 of Sheu et al. discloses that “[w]hen the adaptive compensator 100 decides that the actuator 72 is near the non-linear region 92 (as described before, this means the magnitude of the error signal is greater than a predetermined value), then it makes the driving device 70 to provide a supplementary force to drive the sled.”

In other words, the supplementary force is determined by the magnitude of the error signal. However, neither the specification nor FIG. 6 of Sheu et al teaches or suggests a step of dividing the error signal or the first sledge driving signal into segments based on a magnitude

thereof, in which the second sledge driving signal is generated from the error signal or the first sledge driving signal in the same segment has the same voltage.

Applicants do not agree that such a claimed limitation can be “inherently” deduced from Sheu et al., as improperly asserted by the examiner, and as further discussed below.

### **Anticipation by Inherency**

Applicants respectfully traverse the Examiner’s contention of inherency with respect to the limitation in dependent claim 7 that provides a step of “dividing the error signal or the first sledge driving signal into segments based on magnitude thereof, wherein the second sledge driving signal generated from the error signal or the first sledge driving signal in the same segment has the same voltage.”

Applicants submit that no fair characterization of the applied art can find such a limitation to be “inherent”. “To serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference and that it would be so recognized by persons of ordinary skill.<sup>7</sup> “To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’<sup>8</sup>

The Examiner has provided no evidence, beyond mere assertion, that the claimed subject matter is “inherent”. Further, Applicants question the particularity of any such determination of inherency, particularly in light of the detailed recitation of providing a step of “dividing the error signal or the first sledge driving signal into segments based on magnitude thereof, wherein the

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<sup>7</sup> *Continental Can Co. v. Monsanto Co.*, 20 USPQ 2d 1746, 1749 (Fed. Cir. 1991).

second sledge driving signal generated from the error signal or the first sledge driving signal in the same segment has the same voltage.”

In the event that the Examiner persists with this line of rejection, Applicants request that a properly combinable reference teaching or suggesting this limitation be provided with the next office action, or that the asserted “inherency” of the claimed limitation be supported by evidence for the record. In the absence of such an explicit teaching of this detailed limitation or evidence in support, the anticipation rejection of claim 7 should be withdrawn.

**Unpatentability Rejection over Sheu et al. in View of Kawada et al.**

Withdrawal of the rejection of claims 4 and 9-10 under 35 U.S.C. §103(a) as being unpatentable over Sheu et al. (US 6,717,892) in view of Kawada et al (US 6,603,717) is requested.

At the outset, Applicant notes that, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations.<sup>9</sup> Further, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant’s disclosure.<sup>10</sup>

Whether or not Kawada et al. teaches that for which the Examiner’s offers it, Kawada et al. does not make up for the previously identified deficiencies of Sheu et al., as discussed above with respect to independent claims 1 and 8, from which dependent claims 4 and 9-10 variously depend.

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<sup>8</sup> *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted).

<sup>9</sup> See MPEP §2143.

<sup>10</sup> *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) and See MPEP §2143.

Accordingly, withdrawal of the rejection and allowance of claims 4 and 9-10 are respectfully requested.

**New Claims**

New dependent claims 11-13 have been drafted to avoid the applied art, and to further define that which Applicants regard as their invention by using alternative claim language.

No new matter is involved with any new claim. Consideration and allowance is respectfully requested.

**Conclusion**

In view of the above amendment and remarks, Applicants believe that each of pending claims 1-13 in this application is in immediate condition for allowance. An early indication of the same would be appreciated.

In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number indicated below.

Although no fees are believed to be due with this response, for any fees that are due, including fees for extensions of time or excess claims, the Director is hereby authorized to charge any fees or credit any overpayment during the pendency of this application to CBLH Deposit Account No. 22-0185, under Order No. 22171-00020-US1 from which the undersigned is authorized to draw.

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Respectfully submitted,

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